

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018662**Date Inspected:** 20-Nov-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1500**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** ShangHai, China**CWI Name:** Tian Lei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

Summary of Items Observed: On this date Caltrans OSM Quality Assurance(QA) Inspector, DJ Shin was present during the times noted above for observations relative to the work being performed.

Bay 1

This QA Inspector observed the following work in progress for Bay 1.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Xiang Feng Feng.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector.

Components: Traveler Rail

PCMK: 20TR2-034-009

Welder: 216872

Report: B-WR16942

WPS-345-FCAW-1G (1F)-Repair-1

Bay 2

This QA Inspector observed the following work in progress for Bay 2.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Xiang Feng Feng.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

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Listed below are the locations that were identified by this QA inspector.

Components: Grillage Plate

PCMK: SA7512-001-030

Welder: 066421

WPS-B-T-2233-TC-U5-F

PCMK: SA7512-001-043

Welder: 066443

WPS-B-T-2233-TC-U5-F

PCMK: SA7512-001-057

Welder: 066734

WPS-B-T-2233-TC-U5-F

PCMK: SA7512-001-058

Welder: 066734

WPS-B-T-2233-TC-U5-F

Components: Vertical Shear Plate

PCMK: SA3447-001-022

Welder: 207465

WPS-B-T-2132-3

Components: Floor Beam

PCMK: FB3343-001-017

Welder: 066236

Report: B-WR17363

WPS-345-FCAW-2G (2F)-Repair-1

PCMK: FB3343-001-315

Welder: 66763

Report: B-WR17386

WPS-345-FCAW-2G (2F)-Repair-1

PCMK: FB3343-001-327

Welder: 067888

Report: B-WR17388

WPS-345-FCAW-2G (2F)-Repair-1

Heat straightening of PCMK, AP3032-001, under approved Heat Straightening procedure, HSR 1(B)-9855, The in process temperature was at the time of this observation witnessed at less than 600°C. The ZPMC QC was identified as Xiang Feng Feng. The approved HSR procedure stated that a maximum temperature of 600°C, with 1-3 applications. The distortion that was previously measured and recorded on the HSR was Maximum 14mm.

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This QA inspector performed Magnetic Particle Testing (MT) and Visual Inspection (VT) of approximately 15 % of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member(s) is/are identified as follows; LD3049-001, on item number 1 of NWIT tracker document # 07432

This QA inspector performed Ultrasonic Testing (UT) of approximately 10 % of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The member(s) is/are identified as follows; SA3416-001L, LD3051-001, LD3048-001 on Item number 3 of NWIT tracker document # 07434,

Bay 3

This QA Inspector observed the following work in progress for Bay 3.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Zhang Ya Xu.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector.

Components: Floor Beam

PCMK: FB3286-001-114

Welder: 055564

Report: B-WR17450

WPS-345-FCAW-2G (2F)-Repair-1

PCMK: FB3286-001-393

Welder: 055491

Report: B-WR17451

WPS-345-FCAW-2G (2F)-Repair-1

PCMK: FB3286-001-145

Welder: 052696

Report: B-WR17453

WPS-345-FCAW-2G (2F)-Repair-1

PCMK: FB3286-001-342

Welder: 050242

Report: B-WR17461

WPS-345-FCAW-2G (2F)-Repair-1

Heat straightening of PCMK, LD3041A-001, under approved Heat Straightening procedure, HSR (B)-436, The in process temperature was at the time of this observation witnessed at less than 600°C. The ZPMC QC was identified as Zhang Ya Xu. The approved HSR procedure stated that a maximum temperature of 650°C, with 1-3 applications. The distortion that was previously measured and recorded on the HSR was Maximum 10mm.

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This QA inspector performed Ultrasonic Testing (UT) of approximately 10 % of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The member(s) is/are identified as follows; LD3041-001, LD3043-001, Item number 1, 2 of NWIT tracker document # 07434,

Bay 6

This QA Inspector observed the following work in progress for Bay 6.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Li Jia.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector.

Components: Deck Plate

PCMK: DP3165-001-057

Welder: 054467, 048659

Report: B-CWR2243

WPS-345-SMAW-2G (2F)-Repair-1

Bay 7

This QA Inspector observed the following work in progress for Bay 7.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Li Jia.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector.

Components: Barrier Rail

PCMK: W2-SB10-038-019,050,081

Welder: 215689

WPS-B-T-2131-B-U2-F

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

No relevant conversations

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Shin,DJ	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
